NOTE XXXVI.

ON PERICHAETA SIEBOLDI HORST

BY

Dr. R. HORST.

In a recent paper on earthworms of Japan by Seitaro Goto and Shinkichi Hatai [1]) there is a short note about *Perichaeta Sieboldi*, a species described by myself several years ago and based on a specimen collected by von Siebold in the same country [2]). Rosa afterwards examined a couple of individuals belonging to the Museum of Vienna and published a detailed description of this species, in which my own observations were confirmed and amplified [3]). Beddard identified with *P. Sieboldi* a small specimen [4]), collected by Masatoka Rokugo, but added not much to our knowledge of the worm, while Michaelsen gave an annotation [5]) about a not quite mature specimen of the Berlin Museum, which differed by having spermathecae with a short and straight diverticulum.

The principal characters of *P. Sieboldi* are the presence of three pairs of spermathecae, opening into the intersegmental groove of segments VI/VII, VII/VIII, VIII/IX and the number of bristles in this region, being about 80 (76 Rosa). However, among the numerous earthworms, examined by our Japanese colleagues, they did not meet with a

1) Annot. zoolog. japon. vol. II, pt. 3, 1898.
2) Notes from the Leyden Museum, vol. V, 1883, p. 191.
3) Ann. K.K. Naturh. Hofmuseums, vol. VI, 1891, p. 401.
4) Zoolog. Jahrbüch. (Abh. für Syst. etc.), Bd. VI, p. 759.
5) Archiv. f. Naturgesch., 1892, p. 27.

single specimen, exactly presenting the above named characters. On the contrary they observed several individuals in which the spermathecae lie one segment more anteriorly, therefore opening in the groove between segments V/VI, VI/VII, VII/VIII, and in which the number of setae in the spermathecal region only amounts to 60. Because these worms not only have a very wide distribution in Japan, but are also found in the same locality where the specimens of the European authors have been collected, they regard them as belonging to *P. Sieboldi*, though they hesitate to suppose that all the specimens in Europe should present the same variation, or that there should have been made a mistake in stating the situation of the spermathecae. It is much to regret, that Goto and Hatai say nothing about the other characters of their worms, and only mention the number of setae lying between the male pores, being 14—19; for *P. Sieboldi* shows the remarkable feature, that instead of the single intestinal coecum of most other *Perichaeta*-species, there are six or seven of these diverticula, separated in two groups, of which the superior one is the longest. Moreover, both Rosa and I myself found the spermathecae provided with a zigzag diverticulum and the large prostata divided in three lobes, two larger crescentic ones and a smaller, pear-shaped one in the middle. After a re-examination of the type-specimen, by which were confirmed all my observations, made fifteen years ago, and considering that the observed differences can hardly be ascribed to variation, I cannot believe, that the worms examined by the Japanese authors belong to our *P. Sieboldi*, but I venture to suggest that they must be identified with a nearly allied species *P. Ijimae* [1]), also from Japan and circumstantially described by Rosa. In this species, that appears to be half as long as *P. Sieboldi*, the spermathecae lie one segment more anteriorly and the

1) Loc. cit. p. 402.

number of setae in the spermathecal region amounts to 60 [1]).

There is also a smaller number of bristles between the spermathecal pores, for Rosa states that they are situated »in der neunten Borstenlinie", while in *P. Sieboldi* they lie in the eighteenth, counting from the ventral median line, thus showing 36 bristles in the space between the spermathecal pores. In *P. Ijimae* the dorsal pores commence behind the clitellum, while in *P. Sieboldi* the first of them lies in front of it, in the intersegmental groove XII/XIII. Rosa found the spermathecae of *P. Ijimae* without a diverticulum, and instead of the lobed intestinal coecum of *P. Sieboldi* that species only shows a single coecum extending anteriorly over five segments. As it is rather difficult to discriminate the continually increasing number of *Perichaeta*-species, I hope the Japanese authors will give us a more detailed account of the characters of the specimens they examined [2]). For it is a strange fact that hitherto they have not come across any of the nine species, described by European authors.

Leyden Museum, December 1898.

1) Perhaps specimen ♂ of *P. Hilgendorfi* Mich. also belongs to this species.

2) Unfortunately there crept some errors in the table annexed to the paper, upon which the attention may be fixed: *P. fuscata* is said to possess four pairs of spermathecae in segments VI—IX, while on the table only three of them are indicated in segments V—VII; *P. campestris* has two pairs of spermathecae in segment VIII and IX, while on the table three of them are enumerated in segments VI—VIII; the first dorsal pore lies in the intersegmental groove XIII/XIV according to the text, on the table between segment XII and XIII. *P. heteropoda* has no prostata, while on the table it is indicated in segment XVIII.